



999 WEST VALLEY ROAD
WAYNE, PENNSYLVANIA 19087
215-687-9510

164410

ORIGINAL
(Red)

May 19, 1987
C-585-5-7-27
68-01-7346

Mr. Harold Byer
U.S. Environmental Protection Agency
841 Chestnut Building
Ninth and Chestnut Streets
Philadelphia, PA 19107

Subject: Sampling Plan
TDD No. F3-8612-63
Kennett Square Junkyard (Nosneski Junkyard)
Kennett Square, Pennsylvania

Dear Mr. Byer:

Submitted herewith is a revised sampling plan for the subject site. The site inspection has been scheduled for Wednesday, May 27, 1987 and Thursday, May 28, 1987, if necessary. Permission for access was granted by Mr. Randy Schauer, lawyer for the Nosneski estate.

Summary

A fire occurred at this inactive junkyard in 1980. Runoff from the fire was observed flowing into the West Branch of Red Clay Creek. Sampling at points downstream of the site by the United States Geological Survey (U.S.G.S.) in 1984 showed elevated levels of phenols and coal tars, which may have been a result of the fire. Debris from the fire has been stored on site in a waste pile. Scrap metal is being removed because the site owners are in the process of selling the property.

The Pennsylvania Department of Environmental Resources (PA DER) sampled the creek after the fire in 1980; full priority pollutant analysis has not been conducted since that time. The Chester County Health Department conducted a sampling for volatile organics in the creek in 1983 as part of a regional survey evaluating impacts created by the area's mushroom industry. The United States Fish and Wildlife Service also conducted a macrobiotic survey of the creek.

Drinking Water Supply

The borough of Kennett Square supplies water to all residents and industries within borough limits. The sources are a well located 1.5 miles north of the borough and a surface water intake on the East Branch of Red Clay Creek. A total of 5,000 people are served by these sources. The Southeastern Chester County Authority also serves a portion of the population within the vicinity of the site. Private wells are located at several residences in the vicinity of the site, outside of the Kennett Square borough limits. In addition, the mushroom industry plants in the area utilize wells for processing and potable water supply. A FIT 3 well survey, conducted on January 21, 1986, has identified well locations in the site vicinity.

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Geology Information

Lying within the Piedmont Province of the Appalachian Highlands, the site is situated in a valley floored by the Cockeysville Marble. Formations within a three-mile radius of the site are representative of an area degraded by regional metamorphism, which has formed bank-like features that trend southwest to northeast across the region.

The Cockeysville Marble is a white to light gray, medium- to coarse-grained marble, approximately 400 feet thick. The weathered zone is 40 to 60 feet in depth and, therefore, enhances water storage capacity.

Groundwater Information

The site is underlain by the Cockeysville Marble, which contains a well-developed system of joints. Groundwater movement and storage take place largely in these joints. The weathered zone is well formed, enhancing storage capacity at shallow depths. Depth to groundwater is 40 to 60 feet and yields of 100 gallons per minute are common.

A U.S.G.S. report, "Groundwater Resources of Chester County, Pennsylvania," indicates that groundwater moves from recharge points in upland regions to discharge points in valleys and streams. With rare exception, streams in Chester County act as drains for the groundwater reservoir.

The topographic and geologic setting of the Kennett Square Junkyard indicates that only a small area south of the site may be considered downgradient of the site. There are no groundwater users in this area; therefore, a downgradient sample cannot be obtained for the subject site.

Sampling to Date

PA DER sampled the West Branch of Red Clay Creek after the 1980 fire. The U.S.G.S. conducted a 1984 sampling in the region and identified phenols as well as coal tars in Red Clay Creek sediments. The only other samplings have been macrobiotic surveys conducted by the United States Fish and Wildlife Service and a 1983 Chester County Health Department study of the mushroom industry's impacts on surface waters.

Proposed Sample Locations

The proposed sample locations included the following:

- o A total of four aqueous and four sediment samples will be obtained from the West Branch of Red Clay Creek at locations upstream and downstream of the site, and at the points of entrance of site drainage. Aqueous samples will be obtained according to WPSI-1, Rev. 1, Sections 8.4.2 and 8.4.2.1. Sediment samples will be collected in accordance with WPSI-1, Rev. 1, Section 8.4.4.1.

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- o A total of four soil samples, if necessary, will be obtained from the on-site drum storage area. Samples will be obtained in accordance with WPSI-1, Rev. 1, Sections 8.4.5 and 8.4.5.1.
- o A background soil sample will be collected in accordance with WPSI-1, Rev. 1, Sections 8.4.5 and 8.4.5.1.
- o Three drum samples will be obtained from the Nosneski property. These drums will be sampled in accordance with WPSI-1, Rev. 1, Sections 8.4.7 and 8.4.7.1.
- o A total of two sediment samples will be obtained from a tributary of the West Branch of Red Clay Creek. Sediment samples will be collected in accordance with WPSI-1, Rev. 1, Section 8.4.4.1.
- o A total of four soil samples will be obtained from drainage areas situated near a Philadelphia Electric substation. Samples will be collected in accordance with WPSI-1, Rev. 1, Sections 8.4.5. and 8.4.5.1.
- o Eight soil samples will be obtained from a drainage swale located southeast of the Nosneski Junkyard and south of the railroad tracks. Samples will be collected in accordance with WPSI-1, Rev. 1, Sections 8.4.5 and 8.4.5.1. Subsurface samples will be collected in accordance with WPSI-1, Rev. 1, Sections 8.4.5 and 8.4.5.1, method 3.

The estimated number of samples to be obtained is 9 aqueous and 25 solids, including blanks and duplicates.

Full-scan priority pollutant analysis will be performed on all stream aqueous and sediment samples and all on-site (Nosneski property) samples, to include drum samples and soil samples.

Polychlorinated biphenyl (PCB) analysis will only be performed on samples from the tributary, the swale, and the Philadelphia Electric substation.

Paul Dietrich has been appointed Team Leader and will be responsible for the sampling plan.

This sampling program was discussed with Harry Daw, of EPA Enforcement, on several occasions during its preparation.

Mr. Harold Byer
U.S. Environmental Protection Agency
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Kennett Square Junkyard (Nosneski Junkyard) Sampling Plan

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Please endorse below and return with your approval or amendments to this plan. If you have any questions, do not hesitate to call either Thomas Fromm or me.

Respectfully,

for Garth Glenn
for Garth Glenn
Regional Operations
Manager, FIT 3

William Wentworth
Thomas Fromm
Assistant Manager

Audrey Fleisher
Audrey Fleisher
Quality Assurance

GG/cv

Attachments

Approved by: _____

Date: _____

Amendments: _____

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ATTACHMENT 1

AR100192

1. A. COST CENTER: Region 3		FIT ZONE I CONTRACT CONTRACT NO. 68-01-7346 TECHNICAL DIRECTIVE DOCUMENT (TDD)		2. NO.: F3-8612-63	
1. B. ACCOUNT NO.: S575PA73SI				2. A.: <input type="checkbox"/> NEW ASSIGNMENT <input checked="" type="checkbox"/> AMENDMENT	
3. A. PRIORITY: <input checked="" type="checkbox"/> HIGH <input type="checkbox"/> MEDIUM <input type="checkbox"/> LOW		4. A. ESTIMATE OF TECHNICAL HOURS: 300		5. A. SSID NO.:	
3. B. KEY EPA CONTACT: NAME: L. Acker H. Daw PHONE: 597-3165 597-6680		4. B. ESTIMATE OF SUBCONTRACT COST:		5. B. EPA SITE NAME: PA-281 / Kennett Square Junkyard *	
		5. C. CITY/COUNTY/STATE: Kennett Square, Chester, PA.		6. DESIRED REPORT FORM <input checked="" type="checkbox"/> FORMAL REPORT <input type="checkbox"/> LETTER REPORT <input type="checkbox"/> FORMAL BRIEFING <input type="checkbox"/> OTHER (SPECIFY):	
				7. A. START DATE: 05/87	
				7. B. ESTIMATED COMPLETION DATE: 11/30/87 <i>Draft.</i>	
8. TYPE OF ACTIVITY: <input type="checkbox"/> PA <input checked="" type="checkbox"/> SI <input type="checkbox"/> ESI <input type="checkbox"/> HRS SUPPORT <input type="checkbox"/> QA SUPPORT <input type="checkbox"/> SPECIAL STUDIES <input type="checkbox"/> ENFORCEMENT SUPPORT <input type="checkbox"/> TRAINING <input type="checkbox"/> EQUIPMENT MAINTENANCE <input type="checkbox"/> GENERAL TECHNICAL ASSISTANCE <input type="checkbox"/> PROGRAM MANAGEMENT					
9. GENERAL TASK DESCRIPTION: Perform a site inspection of the subject site. (Extent of contamination study). <u>AMENDMENT DUE TO CHANGE IN START DATE</u>					
10. SPECIFIC ELEMENTS: 1.) Review background information. Refer information obtained under TDD-F3-8512-03. 2.) Meet with Harry Daw (597-6680) to determine requirements. 3.) Contact state and local agencies for relevant information. 4.) Prepare and submit sampling plan to EPA for approval. 5.) Coordinate lab analysis. Arrange site access. 6.) Conduct on and off site inspection and sampling. <i>No samp constraints</i> 7.) Take and ship samples according to standard protocol. 8.) Prepare and submit field trip report, due two weeks after site inspection. 9.) Perform quality assurance review of lab data. 10.) Prepare and submit report, include in cover letter recommendations for need of HRS. <input checked="" type="checkbox"/> ADDITIONAL SCOPE ATTACHED 11.) All work on this project to be performed according to: WP-SI-1, Rev. 1. Refer to attached request for additional instructions.				11. INTERIM DEADLINES:	
12. COMMENTS: *Site Alais: Nozensky Junkyards State Code 042 County Code 029					
13. AUTHORIZING: <input checked="" type="checkbox"/> RPO <input type="checkbox"/> DPO <input type="checkbox"/> PO <i>Harold G. Byer</i> (SIGNATURE)				14. DATE: 4/22/87	
15. RECEIVED BY: <input checked="" type="checkbox"/> ACCEPTED <input type="checkbox"/> ACCEPTED WITH EXCEPTIONS (ATTACH) <input type="checkbox"/> REJECTED <i>Anna W. Wilson</i> (CONTRACTOR FITOM SIGNATURE)				16. DATE: 4/24/87	

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ATTACHMENT 2

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Proposed Sample Locations

KEY

○ Sample location

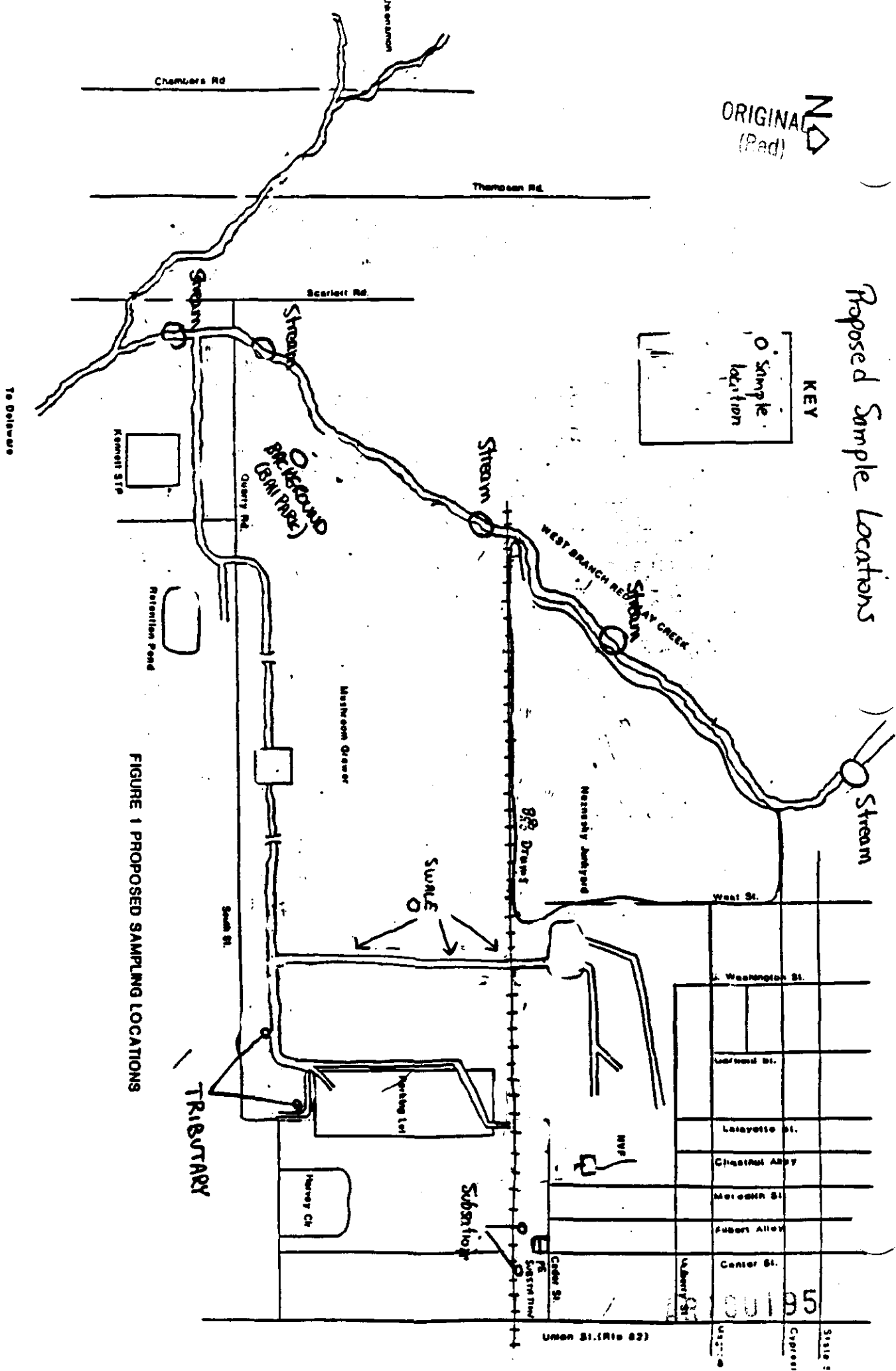


FIGURE 1 PROPOSED SAMPLING LOCATIONS

NOT TO SCALE

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State :
Caption :
Scale :